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ABSTRACT

Many educational and employment problems of racial minorities, women, older adults, and the handicapped are associated with equity, discrimination, and equality. In economics, the concept of equity and its relevance to employment and education can best be understood through an analysis of two labor market theories. The theory of human capital sees the solution to problems of inequity and inequality in the realms of education; the dual market theory sees the solution in integration of secondary workers into the primary market. Discrimination in the labor market has made it difficult for minority groups to achieve economic equity in terms of employment and income. Future underutilization of the human resource potential for minorities may worsen the distribution of income. Since the 1960s educational programs have been designed to assist minorities in achieving economic equity and employability. Vocational education has been especially responsive and has increased their earnings and employability. Because of increasing minority demand for vocational education, equity considerations in vocational education will become of major significance to their economic progress and can be instrumental in improving economic equity and the distribution of income. (YLB)

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EQUITY AND VOCATIONAL EDUCATION:

From An Economist's Perspective

by

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GILBERT CARDENAS is an Associate Professor of Economics at Pan American University. He was formerly a fellow in economic policy at the Brookings Institution in Washington, D.C. He received a bachelor's degree in economics from the University of Texas at Austin and completed his master's in labor and industrial relations at Michigan States, and doctorate at the University of Illinois, respectively. He has served in various capacities as an employment policy expert and labor economist for a number of state and university agencies and institutions. He has conducted research on the economics of discrimination, equal employment opportunity, collective bargaining, and employment policy problems of minorities, youth, women, and illegal immigration. His publications reflect his keen interest in and broad knowledge of the employment problems of Hispanics. He has consulted with the U.S. Commission on Civil Rights, Immigration and Naturalization Services, and the Vice President's Task Force on Youth among others. Dr. Cardenas was named one of the "Outstanding Young Men in American" by the U.S. Jaycees in 1978.

BACKGROUND

For many years there has been considerable attention over the socio-economic problems of the various racial minorities such as blacks, Hispanics and women. Among the major problems these groups have experienced include high unemployment, poverty, and lower incomes. In recent years, there has also been a concern over the economic status of other protected groups such as the older population and the handicapped. Today, as in the past, these protected groups under government laws and regulations continue to experience severe problems in education and unemployment. With the unfavorable economic developments in the country associated with the economic recession, the economic outlook for these groups is likely to worsen in the 1980's. Despite the fact that the educational attainment of these protected groups has increased, the educational progress for these groups, particularly the racial minorities, has been slow. Minorities and women have also experienced serious problems in employment, despite their gains in education. Blacks and Hispanics continue to experience lower earnings and higher unemployment problems than their white counterparts. Similarly, women continue to earn less than men and the gap has been widening. The economic recession has made it more difficult for the handicapped and older workers in the job economy. Many educational and employment problems of these protected groups are associated with equity, discrimination, and equality. Although the federal government has attempted to alleviate the economic crisis of these protected groups in education and employment in the form of antidiscrimination laws and regulations under the Civil Rights Act of 1964 and subsequent legislation, their efforts have met with limited success. Discrimination in employment

and education in both the private and public sectors continues to be a persistent problem in American society.

This paper analyzes the economics of equity as related to minorities, women, other protected groups, and vocational education. The performance of minorities, women and the handicapped in employment and education is also assessed. The barriers that these protected groups experience in the labor market are also analyzed. Special consideration will be given to the barriers that these protected groups may experience in vocational education with respect to equity. Moreover, the paper will analyze the policy implications of equity consideration in the development, planning, and administration of a more equitable and responsive vocational education program.

In economics, the concept of equity has been indeed a difficult concept to define. For many years, economists have sought to explain and reach a common definition over the concept of equity in economics. It is in the nature of this phenomenon that economic equity is easier to recognize than to define. Since the nineteenth century, utalitarian economists such as John Stuart Mill, spent much of their time searching for the principles that could lead to a condition of equity. By the 1940's, economists reluctantly came to the conclusion that there were no economic statements that could be made about equity. By the 1950's, questions of economic equity were not even discussed in basic economics, except to note that it was necessary for a market economy to have a just distribution of resources (Thurow, 1973).. With the social revolution of the sixties associated with its rediscovery of poverty and the civil rights movement, there has been a concern once again over the debate over distributional questions of equity and in equality in America.

The concept of equity has been the cause of more misunderstandings

than any other term in economics because economic equity means different things to different people. Oftentimes, the concept of equity is associated with justice and merit. The major problem in defining equity is that there is no universal answer. Another difficulty with the concept of equity is that value judgments play an important role in specifying economic equity. Because of this, the concept of equity may mean different things to different people depending on the value they hold and ideologies they profess. In the job economy, employers, workers, and government have a different perception of the economics of equity.

Despite the definitional problems in the concept of equity, several efforts have been undertaken in the contemporary setting toward a better understanding of the economic equity. Among the major contributions to the economic literature has been that of Rawls' theory of justice. Rawls provides a philosophical approach toward the economics of equity in terms of two principles of justice (Rawls, 1971). According to Rawls:

1. Each person has an equal right to the most extensive of equal basic liberties compatible with a similar scheme of liberties for all.

2. Social and economic inequalities are to meet two conditions: they must be (a) the greatest expected benefit of the least advantaged members of society (the maximum equity criteria) and (b) attached to offices and positions open to all under conditions of fair equality of opportunity.

According to Rawls' theory of justice, inequality and inequity are similar. Under his theoretical formulation, inequality of income and wealth is permitted only when it can be shown to be to the advantage of the members of society lowest down on the economic scale. The basic presumption is equality. But if it can be shown that by giving more income to one person, this actually leads directly or indirectly to a greater income for those left behind--then this degree of inequality is permitted (Gill, 1976).

According to Lester Thurow who has done extensive work on the economics of equality, poverty and discrimination, the concept of equity is explained in terms of four elements.

1. Reliance can be placed on process and procedures. An economic game is specified as fair or equitable when individuals agree on the rules of the game, and any outcome of the game is thus considered just.

2. Individual preferences can be the key criterion. If the outcome of an economic game is an accordance with the individual preferences of the citizens of a country, the outcome is equitable. Equity is achieved when society reaches the distribution of economic resources that generates the most agreement.

3. Merit, however defined, can be used to specify equity. Equity occurs when resources are distributed in the same manner as merit or marginal productivity.

4. Equity can be related to the common good however defined. Equity is that distribution of economic resources that maximizes the common good, whatever it is (Thurow, 1973).

Thurow, who has conducted extensive research on the redistribution of income as related to the poor, believes that it is indeed possible to qualify and quantify a definition of what economic equity should be. Government and policy makers can reach an agreement on what may constitute an equitable distribution of resources and income. Equity can thus be defined in any of the above economic considerations.

The concept of equity has also been explained in terms of distributive and market justice. The concept of distributive justice is based on the idea of innate merit; that is, all people are presumed--solely by virtue of their birth and their existence, to merit some share of the total stream of goods and services turned by the economic system (Klevorick, 1974). The phrase "from each according to abilities, to each according to needs" also provides an idea of what distributive justice is. According to the theory of distributive justice, some people may believe that all economic goods should be

distributed equally among all members of society. Economic goods are goods that are scarce such as food, clothing, education, and national defense. In this sense, some people may believe that education should be distributed equally among the various groups through equal educational opportunity. To others the idea of distributive justice may mean that innate claims on economic goods ought to be limited to some minimum standard of living, education, and income (Dolan, 1980). The term of market justice or "value for value" is based on the idea of acquired merit. Individuals have no innate claim to a share in the total economic output but merit only whatever share they acquire through production or exchange.

The concept of equity in economics has been used extensively in terms of the distribution of income and resources. Among the goals of equity is to see how fairly an economy distributes its resources and income to its people. In this context, equity is concerned with the unequal distribution of income and wealth (Thurow, 1969). Because of the nature of the economic system, there has been an inequitable distribution of income among minorities and women. The price system in our economy does not cater to any set of ethical standards concerning what is an "equitable" or "just" distribution of income. There is a concern, however, over the inequitable distribution of income and resources for minorities and women, and other groups. Extreme inequity for the various protected groups is often seen as unfair. The inequitable distribution of income is noted by the fact that there is considerable inequality of income or poverty (U.S. Commission on Civil Rights, 1978).

In many ways it can be argued that the distribution of income over the years has become more equitable for various groups. However, even today the inequitable distribution of income has affected more seriously different

segments of our society such as the poor, minorities, and women. In 1978, 12.8 million (22.4 percent) of the total families in the U.S. received incomes of $25,000 or more. However, 5.3 million or 9.3 percent of the total 57.2 million families received incomes below $5,000. The inequity in the distribution of income is also noted by the low incomes of blacks and Hispanics. In 1978, about 17.1 percent of all blacks reported incomes above $20,000; about 24.0 percent of the black families reported incomes below $5,000. In the case of the Hispanics, about 15.8 percent reported incomes below $5,000 as compared to 19.3 percent who reported incomes above $20,000. About 7.6 percent of the white reported incomes below $8,000 and 28.5 percent reported incomes above $20,000. With respect to female heads of households, over 20 percent of the women had incomes below $5,000, and only 8.9 percent reported incomes above $5,000 (U.S. Bureau of Census, 1979).

These economic indicators provide a perspective on the extent of inequality afforded to minorities and women. In 1980, the poor included blacks, Hispanics, women, handicapped, and older workers. In 1964, about one-fifth of the total population were poor. Of the poor, about 22 percent were non-white; and one-fourth of all poor families were headed by a woman (Council of Economic Advisors, 1964). In 1975, the incidence of poverty had dropped to 12.3 percent. However, the incidence of poverty continues to be high for minorities and female heads of households. Income inequality and poverty may be attributed to specific factors such as ability differences, education and training, job tastes, property ownership, market power, and discrimination. Because of differences in mental, physical and aesthetic talents, individuals may make contributions to society which command very high incomes; others like the poor and minorities may be less fortunate. The extent of income inequality may also be explained by the lack of

investment in human capital in terms of education and training. Individuals differ significantly in the amount of education and training they have obtained and hence, in their capacities to earn income. Minorities and women may tend to own little or no property resources. The inequitable distribution of income is also attributed to the lack of market power associated with political power among minorities and the poor. Much of the income inequality is also explained by the economics of discrimination. This concept will be further explained in a later section.

The concept of equity is very much interrelated to the notion of inequality. Equity concepts include issues such as "fair pay," "equal pay for equal work" and "equal reward for equal preparation" (U.S. Commission on Civil Rights, 1978). These equity concepts, however, differ significantly from the fundamental equality concept that everyone should have the same. The concept focuses on the distribution of rewards according to the value of effort, skill, or other criteria, a process that can lead to greater inequality. Income inequity exists if it can be shown that minorities and women who have the same type of job experience, hours of work, and productivity, receive different pay. In 1979 the average female worker was as well educated as the average male; both had completed a median of 12.6 years of schooling. However, the inequities between males and females are illustrated in an analysis of income patterns. For example, full employed women high school graduates (with no college) had less income on the average than fully employed men who had not completed elementary school--$9,769 and $10,474, respectively (U.S. Department of Labor, Women's Bureau, 1980). Other studies in labor economics have analyzed male-female income differentials and have made conclusive findings on the economics of sex discrimination as related to pay (Oaxaca, 1971; Blair, 1972). Numerous studies

have revealed a high degree of similarity and considerable inequity between minority groups and majority males (Levitan, et. al., 1976).

ECONOMIC THEORY AND EQUITY

In economics, the concept of equity and its relevance to employment and education can best be understood through an analysis of two theories of labor markets; namely, human capital theory and the dual labor market theory. The theory is simply a logical extension of the underlying assumptions about human behavior on which most of modern economic theory is based. According to these assumptions, economic persons are rational, and all their decisions are based on deliberate economic calculations. Human capital theory entails the investment in human capital in terms of education (Becker, 1964). Investment in human capital may consist of general training, on-the-job training, schooling. The basis for the theory of human capital is that investment in education does pay, and that the rate of returns for education are generally positive in terms of earnings. People who invest in education usually experience higher earnings that those who do not.

The theory of human capital extends this concept to equity and the determination of the distribution of income and unemployment. Emphasizing individual choice, this theory concludes that the existing distribution of income and unemployment reflects differences in the level of education and training, which in turn, are the direct results of decisions by individuals whether or not to invest in themselves. The lack of adequate employment and income among minorities is due to their own insufficient investment in human capital. Under this theoretical formulation, the solution to the problems of inequity and inequality lies in the realm of education. Empirical evidence of human capital theory has proved that the level of investment

in human capital does increase the level of earnings. However, the rate of return may vary with respect to the type and length of training. For example, studies have been conducted that illustrate that earnings of persons with a college education are significantly higher than for those persons with a high school degree (Marshall, King, and Briggs, 1980). Nevertheless, the rate of return for investment in different kinds of education may be higher for whites rather than for blacks (Harrison, 1971; Hanoch, 1967). Human capital policies since the sixties in the form of government expenditures such as employment and training, vocational education, and other educational programs have contributed toward the general improvement of the educational progress of minorities. In many instances, because of such investments in education, the earnings of blacks, Hispanics, and other minorities have generally improved. Nevertheless, the rate of returns on such investments are generally lower for minorities than for whites. Oftentimes, blacks and Hispanics continue to experience severe employment problems in the labor market despite increased educational attainment.

The dual labor market theory has also special relevance to the concept of equity. The dual labor market formulation views the economy as being conceptually divided into a primary and a secondary sector. The primary sector is characterized by good jobs, high wages, satisfactory working conditions, employment stability, and prospects for promotion. The secondary sector is characterized by bad jobs, low wages, poor working conditions (Doeringer and Piore, 1971). According to this theory, white males are usually employed in the primary sector. Women, teenagers, and in particular minorities, are generally confined to the secondary sector. Because of discrimination in the job market, various groups are subjected to the secondary labor market. The dual labor market theory suggests a more general hypothesis about income determination and distribution in the

United States. According to the theory, a variety of social and economic forces have tended over time to produce a dichotomization of the American labor market (Gordon, 1972). The labor market segmentation has contributed and provides an explanation for the unequal distribution of jobs and income. It also seeks to explain the economic problems of minorities and other groups in terms of poverty and unemployment. Various studies have been conducted to test the validity of this theoretical formulation of local labor markets. Minorities experience severe problems because they are overconcentrated in the secondary labor market. It is indeed difficult for many of these workers to make the transition from the primary to the secondary labor market (Bluestone, 1970; Watchel, 1970). Several factors make this transition difficult. First, the behavioral requirements which are imposed on the work force are different in the primary and secondary sectors, particularly that of employment stability. Secondary workers are generally banned from primary jobs not because they lack certain skills but because they tend to work unreliably and intermittently (Piore, 1970). Because of discrimination, employers may dislike employing workers with certain characteristics. The dual labor market analysis usually applies to the employment problems of blacks and Hispanics, and other disadvantaged workers. The dual labor market analysis refers to the employment problems of women only implicitly. Women are much less able than previously "disadvantaged" workers to identify with "advantaged" workers and to follow their model in the transition to stable work. Further, the social definition of the family and sex roles continues to undercut employment stability among women. And, as the percentage of women in the labor force continues to increase, some employers seem more likely to move many jobs into the secondary market in response to the (expected) behavioral characteristics of secondary women workers (Gordon, 1972).

The dual labor market theorists question the potential effectiveness of the role of education in achieving equity between the primary and secondary sectors. Despite the increased educational attainment of the labor force, many workers cannot make the transition from the secondary sectors to the primary sector because of discrimination and other factors. The dualists claim that the types of training necessary for workers to satisfactorily perform in the primary sector cannot be purchased in schools or elsewhere. Rather, it is only available on the job, and in order to acquire this training, the worker first must be hired, and then must be accepted by the workers in the primary sector who will provide on-the-job training assistance (Doeringer and Piore, 1971). Within this dual framework, the solution to the problems of equity for minorities, women, and other protected groups lies in the integration of the secondary workers into the primary market. The proponents of the dual labor market hypothesis perceive that economic equity can be achieved through various policy options not limited to massive antidiscrimination legislation enforcement, which focuses on the institutional forces they feel underlie the structure and behavior of the labor market. In particular, they propose policies to eliminate discrimination and restrictive practices which have kept people out of the primary sector, and policies to shift the demand for labor, and their jobs, out of a secondary and into the primary sector. The adaption of a long run full employment policy would contribute significantly to the expansion of the number of jobs in the primary sector and could assist secondary workers in making the transition to more stable employment and better wages (Zell, 1975).

DISCRIMINATION AND EQUITY

In light of the aforementioned discussion in the human capital and dual labor market analysis, it is certain that discrimination plays a vital role in the understanding of economic equity and the impact it has on various groups not limited to minorities. In the last few decades, there has been considerable attention devoted to the issue of discrimination. The focus of this attention has been largely on race and sex discrimination. Because of the nature of discrimination, it is easier to recognize than to define. Discrimination means different things to different people. Everyone seems to understand what is meant by discrimination in ordinary conversation, yet there is no single formal definition which can adequately cover every case (Cardenas and Ellard, 1980).

Although the word has a pejorative connotation, discrimination refers literally to any social and economic distinction made between individuals. In this sense, discriminatory decisions and distinctions are made every day. The societal problem is generated by those distinctions that cannot be justified on commonly accepted grounds of equality. In particular, the main concern with discrimination in our individual-oriented society is that individuals are often judged on the basis of their identification with some particular group rather than on individual merits and characteristics.

Some people confuse discrimination and prejudice; they claim public policy cannot legislate morality. But morality is not the purpose of non-discrimination legislation. Public policy is designed to prevent the conversion of beliefs (i.e., prejudice) into overt acts (i.e., discrimination). In the process of enhancing association it also seeks to reduce prejudice, but this is not the primary focus. Where actions are, on their face, unjust and violate the constitutional principles upon which this nation was

founded, promulgation of such governmental policy is justified.

In economics, the theory of discrimination is important for human resource development because discrimination has been a major cause of labor market segmentation, inequity, and low incomes. Discrimination has resulted in the exclusion of social minorities, women, and other workers from certain jobs. It is also prevalent in housing, education, and other sectors. Discrimination in the workplace may be caused by employers, workers, government. The concept of discrimination may be explained in terms of a taste for discrimination by employers. If an employer has a taste for discrimination, he must act as if he were willing to pay something either directly or in the form of reduced income, to be associated with some persons instead of others (Becker, 1957). The economics of discrimination may also occur because white employers act as discriminating monopolists. By virtue of their monopolistic power, they establish hierarchal relationships having both economic and social dimensions in which blacks occupy jobs that are inferior to those held by whites (Thurow, 1969). Discrimination may also be caused by employee preferences for working with members of their own race than by employer's taste of discrimination (Welch, 1967). Arrow rationalizes employer's actions on discrimination based on reality. If employees believe black workers are less productive than white workers, employees will hire the white workers (Arrow, 1972) Discrimination may also entail unequal treatment of persons on the basis of race, sex, age, or handicaps. In this sense discrimination may result in restricting employment, earnings, and educational opportunities for minorities, women, or the handicapped compared to others of similar productiveness. Employers, government entities, and unions may have a taste of discrimination and prefer whites over blacks of equal abilities; similarly they may prefer men

over women of equal abilities. Minorities and women may be forced to accept lower wages or the least attractive jobs. Because of discrimination, equity and equality become more difficult to achieve among minorities and women and other groups in both the private and public sectors.

Discrimination affecting social minorities, women, the handicapped, and other protected groups may be of various types: wage, occupational, employment, and human capital discrimination. Wage discrimination occurs when blacks and other minority workers are paid less than whites for doing the same work. Employment discrimination is associated with the equal access of employment opportunities for minorities, women and others. Employment discrimination in the private and public sectors may occur in the recruitment, hiring, and placement of workers on respective jobs (Doeringer and Piore, 1971). Occupational discrimination exists when blacks, Hispanics, and women have been arbitrarily restricted or prohibited from entering the more desirable, high pay occupations in the primary sector. For many years, blacks and Hispanics have been overrepresented in blue collar occupations rather than white collar occupations relative to their representation in the work force (Cardenas, 1980) In the case of human capital discrimination, the extent of investment in education and training has been relatively high for whites than for blacks as shown in the human capital analysis. Moreover, the rates of returns to education for blacks have been much lower than that of whites. The lack of adequate investment in human capital and the low rates of returns have contributed to many of the employment and earnings problems of minority workers. In the contemporary setting, the experiences of minorities, women, and the handicapped, with respect to employment discrimination, vary from group to group. Respective groups continue to experience different types of discrimination. The prevalence of discrimination

in the labor market has made it more difficult for these groups to achieve economic equity in terms of employment and income.

PATTERNS OF EMPLOYMENT IN THE 1980's

Minorities, women, and other groups continue to experience severe problems in the labor market in the 1980's. Many of their problems are associated with the unfavorable state of the economy. Factors such as the lack of investment in human capital, discrimination, and general attitudes toward the world of work have made it more difficult for these groups in achieving economic equity. The underutilization of the human resource potential for blacks, Hispanics, women, the handicapped, and older workers may worsen the distribution of income in the future. Because of these equity considerations, it is important to assess the economic progress of these groups relative to the state of the labor market.

Women today represent an integral part of the labor force. Women have accounted for three of every five additions to the labor force in the past 25 years. Unlike men, women have quite varied work life expectancies, depending on whether they stay single, marry, give birth to children, or become heads of households. Marriage and the presence of children tend to curtail employment for women, while divorce and the decrease of family responsibilities tend to bring women back into the labor force. The labor force participation rate for women has increased significantly in recent times. In 1970, women represented 36.7 percent of the labor force; by 1979 women represented about 42.2 percent of the labor force. The labor force participation rate for women has increased from 43.3 percent in 1970 to 50.0 percent in 1978 (U.S. Deparmtent of Labor, 1979). Women continue to experience higher unemployment rates than men. In 1978, the unemployment rate was 7.2 percent as compared to 5.2 percent for males. The rate of joblessness

was significantly higher for blacks (13.4 percent) and Hispanic women (10.5 percent). With respect to occupational categories, women continue to be overrepresented in white collar occupations, particularly clerical occupations. In 1978, 63.2 percent of the women in the labor force worked in white collar occupations, as compared to 40.8 percent of the men in similar occupations. For the same year, only 14.8 percent of the women in the labor force were in blue collar occupations such as operatives and laborers; this compares to 46.4 percent of the men in similar occupations (U.S. Department of Labor, 1978). In terms of income, women make considerably lower earnings than men. In 1977, the median earnings of women was $18,618 as compared to $14,626 for men; thus, real earnings for women in 1977 represented only 58.9 percent of earnings of men. In 1976, the median earnings of women ($8,099) represented 60.2 percent of men's earnings ($13,455). The employment problems are even more severe for women head of households. In 1977, median income for families whose head of household was a woman approximated $7,770 or 44 percent of the $17,720 total for husband-wife families (U.S. Bureau of the Census, 1979).

The increased labor force participation of women is attributed to numerous factors. The rising wage rates and expanding job opportunities which have accompanied economic growth have provided obvious economic incentives for women to seek paid employment. Many women have also entered the labor force to supplement family income because of economic necessity. Like men, women have been acquiring more education, therefore increasing their productivity and earnings. Women have also come in because of changes in attitudes toward child rearing as well as their attitudes toward the world of work. Despite the greatly increased labor force participation of women since 1950 and their changing work patterns, women are from achieving

equality in terms of occupational status. The earnings differential between men and women has remained substantial over the last two decades, and women are still concentrated in the lower paid, traditionally female occupations and industries. The balkanization of the labor force into male and female jobs helps explain the significant differences in the earnings of men and women. Yet large differences persist, even when job classification, years of school completed and other variables are held constant (Kreps, 1971). Moreover, women continue to experience serious problems of unemployment, poverty and discrimination.

The employment problems of blacks and Hispanics continue to worsen in many ways. In many instances, the equal employment opportunity gains made in the sixties have been diminished in the seventies. Unemployment continues to be significantly high among blacks and Hispanics, particularly among the youth population. The average annual unemployment rate for blacks and Hispanics in 1979 was 12.2 percent and 8.3 percent, respectively. Unemployment was significantly higher for black and Hispanic youth. The average annual unemployment rate of 1979 for black youth was 28.2 percent as compared to that of 19.1 percent for Hispanic youth. The unemployment rate for Puerto Rican youth in 1979 of 27.8 percent was nearly as high as that of black youth (Cardenas, 1979).

Hispanics experienced slightly higher labor force participation rates than blacks but not of whites. In 1978, the labor force participation rate was 62.9 percent for Hispanics, as compared to 61.4 percent for blacks and 63.4 percent for whites. Both groups are overrepresented in blue collar and service occupations. In 1978, about 46.6 percent of the Hispanic workers were in blue collar occupations as compared to 32.4 percent in white collar occupations. Similarly, about 39.0 percent of the black workers were in

blue collar occupations as compared to 33.5 percent in white collar occupations. About 10.0 percent of the black workers and 7.5 percent of the Hispanic workers were in professional occupations, as compared to 15.1 percent for whites. With respect to the service occupations more than one-fourth of all black workers and 15.3 percent of all Hispanics worked in service occupations (U.S. Department of Labor, 1979).

In terms of income, blacks and Hispanics continue to earn lower incomes than whites. In 1977 the median family income for blacks was $9,653 compared to $11,421 for Hispanics. White median family income was $16,750. Hispanic median family income represented 68 percent of the median white family income. The median earnings for black men and women were $10,445 and $8,097, respectively. Median earnings for Hispanic men and women were $10,798 and $7,516, respectively (U.S. Bureau of Census, 1979).

Both blacks and Hispanics continue to experience severe employment barriers in the labor market. Institutional discrimination is a major problem for both blacks and Hispanics. The lack of adequate labor force skills and educational attainmetn make it more difficult for minorities to compete in the labor market. The educational problems of Hispanics are further compounded by the language barrier. The current state of the economy associated with the lack of aggregate demand has made it more difficult for minorities to compete with other workers in the labor market.

EQUITY IN VOCATIONAL EDUCATION

Since the sixties, education has been instrumental in alleviating the economic crisis of the poor, unemployed and the disadvantage and to bring them into the mainstream of society. In many ways educational programs have been designed to assist minorities in achieving economic equity and employability. Moreover, the evidence from the human capital school

seems to indicate that the more educated workers on the average have higher incomes and experience less unemployment. Since the educational attainment has risen from 9.1 years in 1940 to 12.5 years in 1973, it should have been anticipated that unemployment has seriously diminished. However, the general rate of unemployment, particularly for teenagers has increased significantly. Moreover, it has been argued that the schools have done little or nothing for equality and that we might be better off without it. Some studies have shown that further increases in government expenditures for education have had no effect on the desired equality (Jencks, 1972). Similarly, other studies have provided that inequality in education continues. The Coleman Report demonstrated that family influence was more a potent force than either the quality of schooling. Others have claimed that education has become a formalized credentials procedure that acts as a barrier to the advancement of the poor (Berg, 1970). Moreover, the educational system has also been found guilty of an inverse distribution of income (Hansen and Weisbrod, 1969).

The equity and inequality considerations have also special relevance to vocational education. There has been a concern over the inequitable distribution of government expenditures in vocational education. Since 1968 the vocational education system has had to be more responsive toward the training of the disadvantaged, minorities, and the physically and mentally handicapped. With respect to vocational education there has also been a concern over the returns to vocational education. In general, available studies have supported the usefulness of the additional investment to vocational education (Levitan, et. al., 1976). Vocational education has increased the earnings and employability of minorities and women. Because of vocational education, many minorities, women and the handicapped have

been able to find good jobs in the primary sector.

Minorities, women, and the handicapped have found entry into vocational education much easier than for other educational programs. In 1979, white enrollments in occupational education comprised 67 percent of tht total vocational enrollments. Blacks comprised 18 percent and Hispanics comprised slightly greater than 6 percent (National Center for Education Statistics, 1980). Blacks and Hispanics have experienced higher participation rates than whites in trade/industry and lower rates in health. Both blacks and Hispanics were underrepresented in agribusiness, marketing, and technical occupations. Blacks and Hispanics are also overrepresented in adult education programs. The physically and mentally handicapped were about 4 percent of all vocational enrollments. With respect to sex equity, women have been fairly equally represented in the respective vocational programs. In the adult education programs, about 55 percent of the adult enrollments were women. In the occupational programs, women continue to be overrepresented in the traditional clerical trades such as business office occupations (National Center for Education Statistics, 1980).

Equity in vocational education is associated with the development of an equitably distribution of vocational education resources and services to minorities, women and handicapped persons. Vocational education equity programs must be designed to meet the special needs of these groups. Equity programs must be developed to eliminate discrimination in vocational education. Unver Title VI of the Civil Rights Act of 1964, discrimination is prohibited in federally assisted programs on the gounds of race, color, or national origin. Under the law no person should be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. In the fifteen

years since title VI was enacted, its mandate of equal justice on the basis of race, color, or national origin has been extended to other groups, including women (Title IX of the Education Amendments of 1972), the handicapped (Rehabilitation Act of 1973), and selected age groups (Age Discrimination Act of 1975). The non-discrimination statutes apply to vocational education programs, also.

Federal regulations on the basic nondiscrimination mandate of title are basically clear and apply to vocational education. Any difference in the quality, quantity, or manner in which service or benefit is provided to the various groups may be discriminatory. Discriminatory actions in vocational education may entail restriction of minorities, women, handicapped persons, from membership of advisory or planning councils. Failure to provide information or services in languages other than English where a significant number of potential beneficiaries are of limited English-speaking ability may also entail discriminatory actions. The separate treatment in any manner related to receiving services or benefits may also result in discrimination. These discriminatory actions in vocational education may make it difficult to achieve equity in vocational education.

Discrimination in vocational education can be grouped into several types not limited to (1) disparate treatment, (2) adverse impact, (3) race related activity, and (4) systemic discrimination. Disparate treatment focuses on treatment which in unequal. Disparate treatment in vocational education may occur if whites and minorities, applying for the same program or benefit were treated in an unequal fashion. Adverse impact occurs when allegedly, uniform applied standards and procedures are unequal in their effect. Where a disparate impact falls harshly on one covered group than another and cannot be justified by other causes, it can be deemed an "adverse

impact." Discrimination can also involve discrimination where an individual is adversely affected as a consequence of a "race related activity" based on appearance, beliefs, or reactions that appear to be sexist or racist. With respect to systemic discrimination, equal opportunities may be denied through the inevitable consequences of some established operational practice or procedure, persisting over a period of time, rather than of a specific overt action against an aggrieved party (Cardenas and Ellard, 1980).

Discrimination and inequity in vocational education may occur in the delivery of services provided for minorities, women, and the handicapped. These problems may exist at the different functions of the delivery system not limited to intake, recruitment, training, and placement, and supportive services within the vocational education system. The various groups may receive different supportive services than other groups like whites and males. Discrimination and inequity may result in the inadequate representation of minorities, women, handicapped individuals in the vocational education staffs and planning councils. In vocational education, inequities may also exist if minorities are overrepresented in certain occupations and underrepresented in others. For example, women in gaining entry into vocational education should be equitably represented in the various trades, and not be limited to clerical and health occupations. Discrimination and inequity may also occur in the planning for vocational education programs, if the vocational plans do not reflect the special needs of the various target groups. Discrimination may also occur in the palcement function of vocational enrollees in the job market. The effects of discrimination on vocational education may make it more difficult for minorities and women to achieve equity. The lack of equity will make it more difficult for vocational enrollees to find suitable employment in the job economy. Unsuccessful equity programs can only contribute to the worsening of the

economic plight of minorities, women, and handicapped persons in terms of high unemployment, low incomes, and poverty.

POLICY IMPLICATIONS

The economics of equity has significant policy implications for the present and future of vocational education. An inequitable system of vocational education will have severe implications for minorities, women, and handicapped persons. With the present state of the economy, it is most important to integrate fully equity considerations in theory and practice in the vocational education systems. Equity considerations should be undertaken at all levels of the vocational education system not limited to planning, administration, and the various specific programs.

There is a need to develop viable programs for promoting equity in vocational education at the federal, state, and local levels. Compliance efforts and affirmative action should be reviewed to monitor periodically the equal opportunity and equity programs. There is a need to ensure that minorities, women, the handicapped, are included in the policy making and administration of vocational educational systems. Efforts should be made to include adequate representations of these groups in advisory councils and staffs of vocational education. Vocational educators should ensure that the target groups receive the adequate services and training that are needed for better preparation for the world of work. Minorities, women, and handicapped persons should be fairly represneted in the respective adult and occupational programs and trades. Special technical assistance training should be provided for vocational education staffs in the formulation, development, and implementation of equity programs. Efforts should be made to educate planners, educators, administrators, and other staff on the concept of equity as related to vocational education. There is a need

for vocational educators and the public at all levels to understand the benefits to be gained from developing successful equity programs for the respective groups. With the development of a more equitable system of vocational education, this may result in the maximum utilization of resources and individuals in the preparation for the world of work. Both minorities, women and other groups may experience gains in employment and earnings. Moreover, equity considerations through increased involvement of minorities and women, may result in improved administration and planning of vocational education programs. Equity considerations will also contribute to a more responsive vocational educational system. In the decade of the 1980's, vocational education will become of utmost importance to minorities, women, and other workers. With few exceptions, the labor force participation rate of these groups is likely to increase. Because of these trends, the demand for vocational education for these groups will also increase. Equity considerations in vocational education will become of major significance to the economic progress of these groups and can be most instrumental in the improving economic equity and the distribution of income in America.

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